



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,454	07/30/2003	Paul J. Holmquist	13569.0058US01	9029
23552	7590	11/17/2005	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			GREENE, DANA D	
			ART UNIT	PAPER NUMBER
			3762	
DATE MAILED: 11/17/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/630,454

Applicant(s)

HOLMQUIST ET AL.

Examiner

Dana D. Greene

Art Unit

3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 stands rejected under 35 U.S.C. §102(b) as being anticipated by Thompson (US 6,083,248, hereinafter "Thompson"). Thompson is considered to disclose:

at the implantable pulse generator device, executing at least one application program that provides data that is to be exchanged and executing a set of information exchange instructions on the data obtained from the application program (see col. 8, ln. 44 – ln. 65 and col. 10, ln. 57-64, Thompson). The disclosed implantable pulse generator is considered to anticipate the claimed pulse generator because both function based on a remotely initiated operation;

divide the data into packets, and apply header data to each packet that provides transport control information that controls the reconstruction of the data from the data packets (see col. 17, ln. 55-67, Thompson). The disclosed binary data packets are considered to anticipate the claimed data packets because both collect real time data from the implantable device and communicate to the base station;

wirelessly transmitting from the implantable pulse generator device each of the packets having the header data (see col. 6, ln. 45-55, Thompson). The disclosed

wireless telecommunication is considered to anticipate the claimed wireless transmission because both allow free ranging mobility and allow communication with the processing device to wirelessly receive information.

With reference to claims 15, 19, 22, 23, and 24, Thompson is considered to disclose:

At least one processing device configured to execute at least one application program to control the generation of electrical stimulation to provide the cardiovascular therapy and to utilize received data, the at least one processing device being further configured to execute a set of information exchange instructions (see col. 20, ln. 21-31 and col. 22, ln. 20-30, Thompson);

obtain incoming data packets, and extract header data that provides transport control information from each of the incoming data packets to allow the data to be reconstructed from the packets for use by the at least one application program (see col. 17, ln. 55-67, Thompson). The disclosed binary data packets are considered to anticipate the claimed data packets because both collect real time data from the implantable device and communicate to the base station;

a pulse generator in communication with the at least one processing device to generate electrical stimulation to provide the cardiovascular therapy (see col. 8, ln. 44 – ln. 65 and col. 10, ln. 57-64, Thompson). The disclosed implantable pulse generator is considered to anticipate the claimed pulse generator because both function based on a remotely initiated operation;

a receiver in communication with the at least one processing device to wirelessly receive the incoming data packets having the transport control information and provide the incoming data packets to the at least one processing device (see col. 6, ln. 45-55, Thompson). The disclosed wireless telecommunication is considered to anticipate the claimed wireless transmission because both allow free ranging mobility and allow communication with the processing device to wirelessly receive information.

Referring to claims 25, 29, and 32 Thompson is considered to disclose:

processing means for executing an application program and for executing information exchange means, wherein the information exchange means is for sending and receiving data packets and exchanging data of the data packets with the application program (see col. 20, ln. 21-31 and col. 22, ln. 20-30, Thompson);

means for dividing outgoing data from the application program into outgoing packets and for reconstructing incoming data from incoming data packets and means for adding transport control information to outgoing data packets and for extracting transport control information from incoming data packets (see col. 17, ln. 55-67, Thompson). The disclosed binary data packets are considered to anticipate the claimed data packets because both collect real time data from the implantable device and communicate to the base station;

means for providing electrical stimulation (see col. 5, ln. 10-35, Thompson). The disclosed means is considered to anticipate the claimed electrical stimulation means because both stimulate body organs and tissue to evoke a response.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 3, 5, 8-9, 16, 18, 20-21, 26, 28, and 30-31 are rejected under 35 U.S.C. §103(a) as being anticipated over Thompson in view of Lee (US 2001/0031997 A1, hereinafter Lee"). The Thompson reference teaches the claimed invention as previously discussed, under the anticipatory rejection, except for the claimed use of TCP network protocol. However, Lee teaches the use of TCP protocol (see col. 13, para. 0044, col. 17, para. 0056, Lee). It would have been obvious to one of ordinary skill in the art to combine the teachings of Thompson with the TCP protocol disclosure of Lee for the purpose of transferring data in packets with transport control information included.

Claims 4, 17, and 27 stand rejected under 35 U.S.C §103(a) as being anticipated over Thompson in view of Nelson et al. (US 2001/0023360 A1, hereinafter "Nelson").

Thompson is considered to disclose the claimed invention as discussed above, under the anticipatory rejection except for the claimed use of UDP protocol. However, Nelson teaches the use of UDP protocol (see col. 16, para. 0057, Nelson). It would have been obvious to one of ordinary skill in the art to combine the teachings of Thompson with the UDP protocol disclosure of Nelson for the purpose of transferring data in packets with transport control information included.

Claims 33 - 39 stand rejected under 35 U.S.C. 103(a) as being anticipated over Thompson in view of Sarwal et al. (US 6,662,052 B1, hereinafter "Sarwal"). Thompson is considered to disclose the claimed invention as discussed above, under the anticipatory rejection, except for the claimed transport layers and connections. However, Sarwal teaches a method and system of transferring data between the data network and implantable medical device utilizing transport layer connections to transfer data in packets (see col. 14, ln. 35-45 and col. 15, ln. 1-6, Sarwal). It would have been obvious to one of ordinary skill in the art to combine the teachings of Thompson with the considered wireless application protocol teaching found in Sarwal for the purpose of wirelessly transmitting packets from the implantable pulse generator device.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana D. Greene whose telephone number is (571) 272-7138. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dana D. Greene

Dana D. Greene


George Manuel
Primary Examiner